



Q: Dear Coach: I am 34 year old woman that weighs 61kg. I am developing my fitness, skill, and sporting levels to compete in local rowing competitions. My aim is to lose body fat and weight and my target is 52kg. Do you believe this is reasonable? - "Lean and Mean"

A: Dear Lean and Mean: Body fat percentages measure the percentage of fat that is contained in your body. These measurements are often preferred to weight scale measurements because they can assure healthy weight loss.

Your body fat may be measured in a number of ways ranging from height and circumference measurements, skin-fold measures, bioelectrical impedance checking the speed of electrical current that runs through the body (current that runs through muscle is faster than fat); hydrostatic weighing (displacing water in a tank with your body); or the platinum-standard measure of dual energy X-Ray absorptiometry (x-ray scans to compare the body with fat images). Many of these modes of measurement have limitations but once you have found the method to determine your body fat, comparisons should be made using the same system or testing agent.

In general, an average healthy female may have a body fat percentage of 25 - 31%. A certain amount of fat is essential for the body to function. Fat helps to insulate and cushion organs, regulate body temperature, maintain hormonal balance, and store energy. For women, essential body fat is 12 - 15%, and for men it ranges 2 - 5%. Athletic women can expect body fat to range 16 - 20% and generally fit women may expect 21 - 24%.

Once you know your body fat percentage, you can check whether your weight loss goals are realistic.

As a 34 year old fit female we may approximate your body fat at approximately 24%. At 61kg, this would mean that 14.64kg of body weight is attributed to fat and over 46kg is comprised of lean body mass of bone, muscle, soft tissue (ligaments, connective tissue, and tendons), organ tissue, blood and body fluids.

$61\text{kg} \times 24\% = 14.64\text{kg}$ body fat; and

$61\text{kg} - 14.64\text{kg}$ body fat = 46.36kg lean body mass.

If your goal is to lose 9kg, down to 52kg, that would mean that you still require 46kg for lean body mass. At this weight, you would be only carrying 6kg of body fat, or 11.5%, dangerously low.

A more realistic goal for competitive rowing may be to reduce your body fat to 18%.

$61\text{kg} \times 18\%$ fat = 10.98kg.

So for you to achieve this, assuming your current body fat is at or near our estimation of 24%, or 14.64kg, you would need to lose only 3.66 kg, an overall target weight of 57.34kg to maintain your lean body mass and strength.

You have a lot to focus on with your sports training, Lean and Mean. Keep your strength and energy up and you should do well. Good luck!



Yours in health and fitness
The Coach

Guest response - Sara Pazell, director of L'Amour Yoga Institute Pty Ltd, is a strength and conditioning coach, occupational therapist, personal trainer and group fitness instructor. She is a fellow Paradise Training trainer with Coach Tim.